WHAT IS CLAIMED IS:

1. A method for enhancing image quality in an image encoding system, including:

applying a median filter to horizontal pixel values of a digital video image;

applying a median filter to vertical pixel values of the digital video image; and

averaging the results of the filtering of the horizontal pixels and vertical pixel values to create a noise-reduced digital video image.

2. The method of claim 1, further including:

applying a median filter to diagonal pixel values of the digital video image; and

averaging the results of the filtering of the diagonal pixel values with the noise-reduced digital video image.

3. A method for enhancing image quality in an image encoding system, including:

applying a temporal median filter to corresponding pixel values of a previous digital video image, a current digital video image, and a next digital video image to create a noise-reduced digital video image.

4. The method of claim 3, further including:

comparing the difference between each corresponding pixel value of each noise-reduced digital video image and each corresponding current digital video image to a threshold value to generate a difference value; and

selecting, for each final pixel value for the noise-reduced digital video image, a corresponding pixel value from the current digital video image if the difference value is within a

first threshold comparison range, and a corresponding pixel value from the noise-reduced digital video image if the difference value is within a second threshold comparison range.

5. The method of claim 4, wherein the threshold value is selected from the range of approximately 0.1 to approximately 0.3.

6. A method for enhancing image quality in an image encoding system, including:

applying a horizontal median filter to horizontal pixel values of a current digital video image;

applying a vertical median filter to vertical pixel values of the current digital video image;

applying a temporal median filter to corresponding pixel values of a previous digital video image, the current digital video image, and a next digital video image; and

applying a median filter to corresponding pixel values produced by each of the horizontal, vertical, and temporal filters to create a noise-reduced digital video image.

7. A method for enhancing image quality in an image encoding system, including creating a noise-reduced digital video image comprising a linear weighted sum of five terms:

a current digital video image;

an average of horizontal and vertical medians of the current digital video image;

a thresholded temporal median;

an average of horizontal and vertical medians of the thresholded temporal median; and

a median of the thresholded temporal median and horizontal and vertical medians of the current digital video image.

8. The method of claim 7, wherein the weights of the five terms are approximately 50%, 15%, 10%, 10%, and 15%, respectively.

9. The method of claim 7, wherein the weights of the five terms are approximately 35%, 20%, 22.5%, 10%, and 12.5%, respectively.

10. The method of claim 7, further including:

determining a motion vector for each *n*x*n* pixel region of the current digital video image with respect to at least one previous digital video image and at least one subsequent digital video image;

applying a center weighted temporal filter to each *n*x*n* pixel region of the current digital video image and corresponding motion-vector offset *n*x*n* pixel regions of the at least one previous digital video image and at least one subsequent digital video image to create a motion-compensated image; and

adding the motion-compensated image to the noise-reduced digital video image.

11. A method for enhancing image quality in an image encoding system, including:

determining a motion vector for each *n*x*n* pixel region of a current digital video image with respect to at least one previous digital video image and at least one subsequent digital video image; and

applying a center weighted temporal filter to each *n*x*n* pixel region of the current digital video image and corresponding motion-vector offset *n*x*n* pixel regions of the at least one previous digital video image and at least one subsequent digital video image to create a motion-compensated image.

12. The method of claim 11, wherein each digital video image is a de-interlaced field-frame.

13. The method of claim 11, wherein each digital video image is a three-field-frame de-interlaced image.

14. The method of claim 11, wherein each digital video image is a thresholded three-field-frame de-interlaced image.

15. The method of claim 11, wherein the center weighted temporal filter is a three-image temporal filter having weights for each of such images of approximately 25%, 50%, and 25%, respectively.

16. The method of claim 11, wherein the center weighted temporal filter is a five-image temporal filter having weights for each of such images of approximately 10%, 20%, 40%, 20%, and 10%, respectively.

17. A method for enhancing image quality in an image encoding system, including:

applying a normal down filter to an image to create a first intermediate image;

applying a Gaussian up filter to the first intermediate image to create a second intermediate image; and

adding a weighted fraction of the second intermediate image to a selected image to create an image having reduced high frequency noise.

18. The method of claim 17, wherein the weighted fraction is between approximately 5% and 10% of the second intermediate image.